

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

REC'D 02 NOV 2004

WIPO

PCT

9 MAR 2005

Applicant's or agent's file reference PF020122		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/50653		International filing date (day/month/year) 24.09.2003	Priority date (day/month/year) 25.09.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/26			
Applicant THOMSON LICENSING S.A. et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 23.04.2004		Date of completion of this report 29.10.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Poppe, F Telephone No. +31 70 340-4378 	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP 03/50653

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-5 as originally filed

Claims, Numbers

1-10 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/50653**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/50653

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The examination is being carried out on the **following application documents**:

Description, pages:

1-5 as originally filed

Claims, No.:

1-10 as originally filed

Drawings, sheets:

1/3-3/3 as originally filed

The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: US-B-6181681

D2: US-A-20010055274

1. The present application does not meet the requirements of **Article 6 PCT**, because **claims 1, 6 and 10** are not clear and concise.

1.1. There is no support in the description for present claim 1. According to the description, page 4, lines 6-26, and figure 3, it is first checked whether the frame contains a multicast group management message and only then the - potentially modified - frame is delivered to an internal bridge module. This means that there is no support for step (b) of the method of claim 1.

1.2. Claim 6 includes all the features of claim 10. Hence, claim 6 should be reformulated as a claim dependent on claim 10.

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claims 1, 6 and 10** does not involve an inventive step in the sense of **Article 33(3) PCT**.

2.1. The document D1 discloses (the references in parentheses applying to this document):

a method for routing data packets in a routing device, comprising the steps of:

- (a) receiving a frame from a device (col. 2, l. 55-58);
- (b) checking whether the frame contains a multicast group management message (IGMP packet) and in the affirmative, forwarding the frame to an internal multicast group management module (microprocessor) (col. 7, l. 8-13), and in the negative, forwarding the frame to an internal bridge module;

from which the subject-matter of claim 1 differs in that the forwarding of the multicast group management frame to the internal multicast group management module takes place by creating a new frame comprising as destination address the address of an internal multicast group management module and as payload at least the multicast management data of the received frame, and forwarding this new frame to the internal bridge module.

The problem to be solved by the present invention may therefore be regarded as how to forward a multicast group management message to an internal multicast group management module via an internal bridge module (as mentioned by the applicant on page 2, line 5-11).

The above-mentioned solution proposed in claim 1 of the present application cannot be considered as involving an inventive step, since it can be considered as a matter of normal design to the skilled person to create a new frame, based on an initial frame, with as destination address the address of an internal module (see for example document D2 (claim 22: "copy (...) to said mirror port")).

2.2. Following a reasoning corresponding to the one given regarding the subject-matter of method claim 1, the subject-matter of corresponding routing device claim 6 and switch circuit claim 10 of the present application cannot be considered as involving an inventive step.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/50653

3. Dependent claims 2-5 and 7-9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows.

3.1. Referring to claims 2 and 7, the first network being an Ethernet network, and the steps of the method being executed by an Ethernet switch is known from D1 (col. 8, l. 18-20).

3.2. Referring to claims 3 and 8, the insertion of a port identifier into a frame is a slight constructional detail which comes within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance.

3.3. Referring to claims 4 and 9, the multicast group management message being an IGMP message is known from D1 (col. 7, l. 8).

3.4. Referring to claim 5, the multicast group management module updating its multicast group information upon reception of a new frame is known from D1 (col. 7, l. 15-17).

4. Furthermore the following is noted:

4.1. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

4.2. Independent claims are not in the two-part form vis-à-vis the closest prior art D1 in accordance with Rule 6.3(b) PCT.